

**What is claimed is:**

1. A port for subcutaneous implantation, comprising:  
a housing including first and second wells formed therein; and  
a substantially F-shaped flow element including first and second lumens extending therethrough wherein, when in an operative configuration the F-shaped flow element is coupled to the housing with a proximal end of each of the lumens in fluid communication with a respective one of the first and second wells for receiving fluid therefrom, and wherein distal ends of each of the lumens form outlets, each outlet being coupleable to a lumen of a medical catheter, the F-shaped flow element including first and second arms extending from a trunk with the first lumen extending through the first arm to the trunk and the second lumen extending through the second arm to the trunk, the first and second lumens being separated from one another within the trunk.
2. The port according to claim 1, wherein the first and second lumens are separated from one another in the trunk by a partition extending across an interior space thereof.
3. The port according to claim 1, wherein the first and second wells are positioned along an axis of the housing and wherein the first and second arms extend from the trunk at an angle relative to an axis.
4. The port according to claim 3, wherein, when in the operative configuration, the trunk extends substantially parallel to the axis.
5. The port according to claim 4, wherein the first and second arms extend from the trunk at an angle of between about 30 degrees and about 60 degrees relative thereto.

6. The port according to claim 1, wherein the first and second arms have a substantially circular cross-sectional shape.
7. The port according to claim 1, wherein the trunk has a substantially circular cross-sectional shape.
8. The port according to claim 1, wherein the first and second arms have a substantially semi-circular cross section.
9. The port according to claim 1, wherein the trunk has a substantially semi-circular cross section.
10. The port according to claim 1, further comprising at least one flow control valve located between a first one of the wells and the corresponding outlet.
11. The port according to claim 1, wherein the F-shaped flow element is integrally formed with the housing.
12. The port according to claim 1, wherein the F-shaped flow element is formed separately from the housing.
13. A dual well port device comprising:  
a housing defining first and second wells disposed along an axis of the housing;  
and  
an F-shaped flow element including first and second lumens independent of one another, the first lumen, when the flow element is in an operative configuration coupled to the housing, being fluidly connected to the first well and having an arm portion extending at a first angle relative to the axis and wherein, when in the operative

configuration, the second lumen is fluidly connected to the second well and includes an arm portion extending at a second angle relative to the axis, the F-shaped flow element including a trunk enclosing trunk portions of the first and second lumens.

14. The dual well port device according to claim 13, further comprising a partition of the trunk separating the trunk portions of the first and second lumens.
15. The dual well port device according to claim 13, wherein the first angle is substantially the same as the second angle.
16. The dual well port device according to claim 13, wherein, when the F-shaped flow element is in the operative configuration, the trunk is disposed substantially parallel to the axis.
17. The dual well port device according to claim 13, wherein the F-shaped flow element is integrally formed with the housing.
18. The dual well port device according to claim 13, wherein a flow control valve is disposed between the first well and an outlet of the first lumen.
19. A method of infusing fluids into a patient, comprising:  
 implanting distal ends first and second catheter lumens into a blood vessel;  
 fluidly connecting each of the first and second catheter lumens to first and second flow element lumens of an F-shaped flow element, the first flow element lumen extending through the trunk and through the first arm to fluidly connect to a first well of a dual well port and the second flow element lumen extending through the trunk and the second arm to a second F arm to fluidly connect to a second well of the port, wherein the first and second flow element lumens are separated from one another in the trunk;  
 introducing a first fluid into the first well; and

introducing a second fluid into the second well so that the first and second fluids are passed to the blood vessel without intermingling with one another prior to leaving the distal ends of the first and second catheter lumens.

20. The method according to claim 19, further comprising injecting each of the first and second fluids into the corresponding ones of the first and second wells through a corresponding septum.
21. The method according to claim 19, further comprising connecting the F-shaped flow element to the dual well port.
22. An F-shaped connector for a dual well port, comprising:
  - a trunk including first and second connector lumens extending therethrough, distal ends of each of the first and second connector lumens being connectable to proximal ends of separate catheter lumens;
  - a first arm of the trunk extending from the trunk at an angle relative thereto and including an arm portion of the first connector lumen, a proximal end of the arm portion of the first connector lumen being fluidly connectable to a first well of the dual well port; and
  - a second arm of the trunk extending from the trunk at an angle relative thereto and including an arm portion of the second connector lumen, a proximal end of the arm portion of the second connector lumen being fluidly connectable to a second well of the dual well port, wherein the first and second connector lumens are separate from one another so that fluid from the first well does not mix with fluid from the first well before reaching the distal ends of the first and second connector lumens.
23. The connector according to claim 22, further comprising a partition of the trunk separating trunk portions of the first and second lumen connector lumens from one another.

24. The connector according to claim 22, further comprising an attachment for a flow control valve at an inlet of at least one of the first and second arms.
25. The connector according to claim 22, wherein the first and second arms are connectable to the port at an angle relative to an axis of the port.
26. The connector according to claim 25, wherein the angle relative to the axis is between about 30 degrees and about 60 degrees.
27. The connector according to claim 22, wherein the trunk is adapted to be disposed when connected to the dual well port at an angle selected to minimize a width of the dual well port.
28. The connector according to claim 22, wherein the trunk has one of a substantially circular and substantially semi-circular cross-sectional shape.